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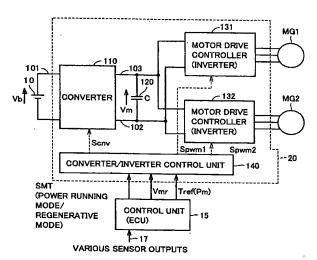
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(54) Title: POWER SUPPLY APPARATUS, MOTOR DRIVE CONTROL METHOD USING THE SAME AND MOTOR VEHICLE HAVING THE SAME MOUNTED THEREON



(57) Abstract: A power supply apparatus driving and controlling motor generators (MG1, MG2) includes a battery (10) generating an input voltage (Vb), a converter (110) converting the input voltage into a motor operating voltage (Vm) according to a voltage command value (Vmr), a smoothing capacitor (120) holding the motor operating voltage, inverters (131, 132) receiving the motor operating voltage and driving and controlling the motor generators (MG1, MG2) according to a torque command value (Tref), and a control unit (15) generating the voltage command value and the torque command value. When the motor generators (MG1, MG2) operate in the power running mode, the control unit (15) operates to make the torque command value smaller than an original required torque as necessary so as to allow the sum of electric power (Pm) consumed by the motors and an amount of change (Pc) in stored electric power of the smoothing capacitor (120) caused as the motor operating voltage increases not to exceed an output electric power limiting value (Pcvlm) of the converter (110).



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